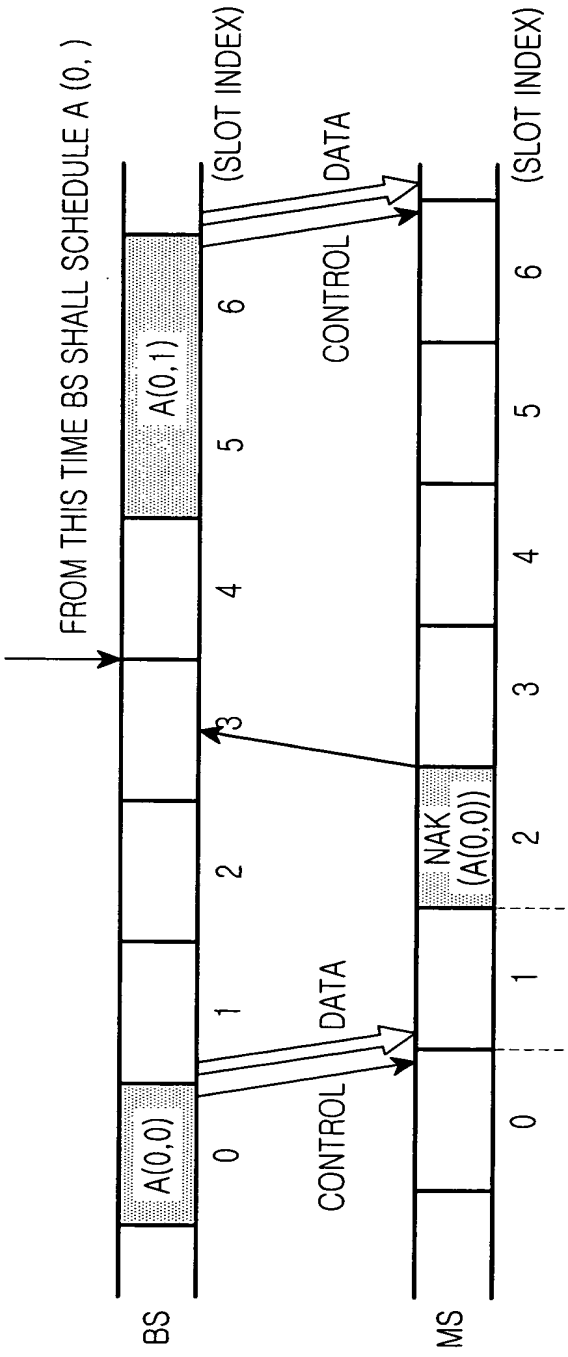
FROM THIS TIME BS SHALL SCHEDULE A (0,)
BS
MS
A(0,0)
A(0,1)
NAK (A(0,0))
CONTROL
DATA
CONTROL
DATA
(SLOT INDEX)
(SLOT INDEX)
0
1
2
3
4
5
6
PROCESSING TIME OF MS
A(x,y)=MOBILE STATION'A'
ARQ INSTANCE(ACID) 'x'
SUBPACKET ID (SPID) 'y'

FIG.1

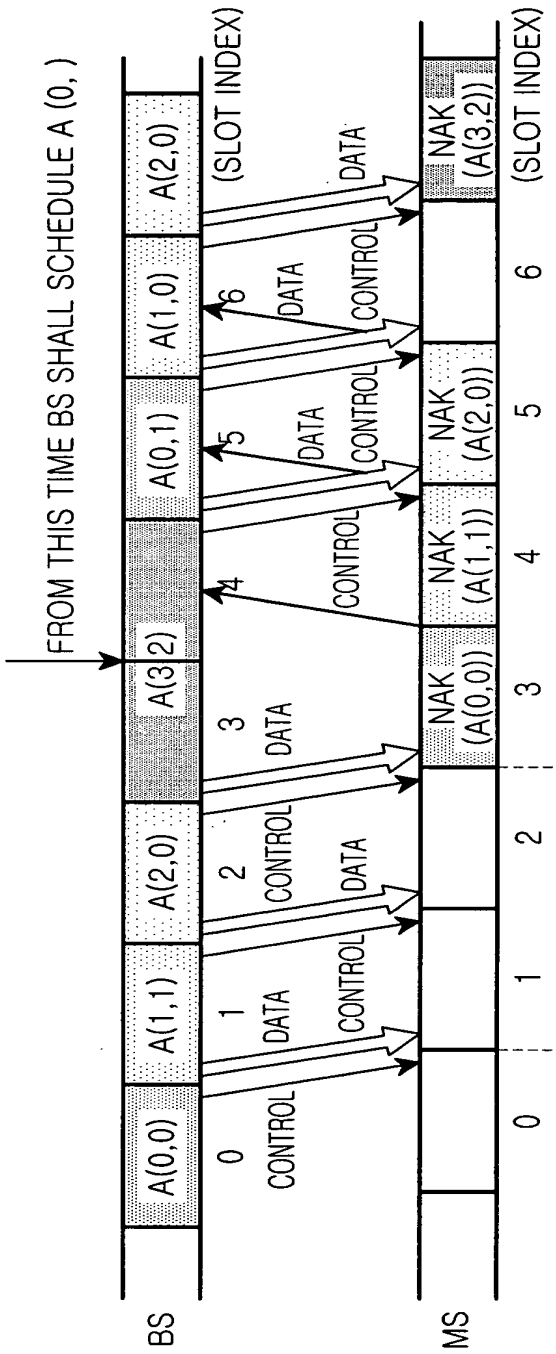
FROM THIS TIME BS SHALL SCHEDULE A (0,)
BS
MS
A(0,0)
A(1,1)
A(2,0)
A(3,2)
A(0,1)
A(1,0)
A(2,0)
(SLOT INDEX)
0
1
2
3
4
5
6
CONTROL
DATA
CONTROL
DATA
CONTROL
DATA
CONTROL
DATA
NAK (A(0,0))
NAK (A(1,1))
NAK (A(2,0))
NAK (A(3,2))
PROCESSING TIME OF MS
A(x,y)=MOBILE STATION'A'
ARQ INSTANCE(ACID) 'x'
SUBPACKET ID (SPID) 'y'

FIG.2

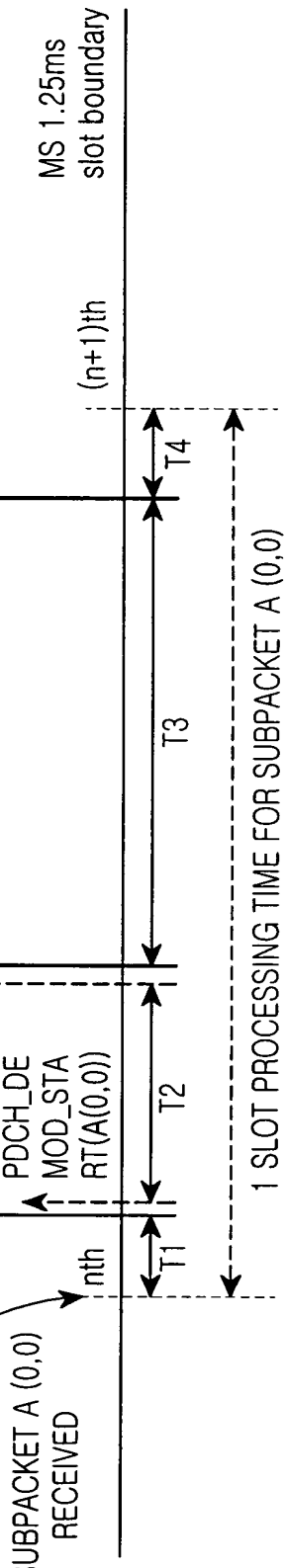
SUBPACKET A (0,0) RECEIVED
PDCCH_DEC_ DONE(A(0,0)
nth
T1
PDCH_DE MOD_STA RT(A(0,0))
PDCH_DEMOD_ DONE(A(0,0))
T2
PDCH_TURBO_ START(A(0,0))
T3
PDCH_TURBO_ DONE(A(0,0))
(n+1)th
T4
MS 1.25ms slot boundary
1 SLOT PROCESSING TIME FOR SUBPACKET A (0,0)

FIG.3

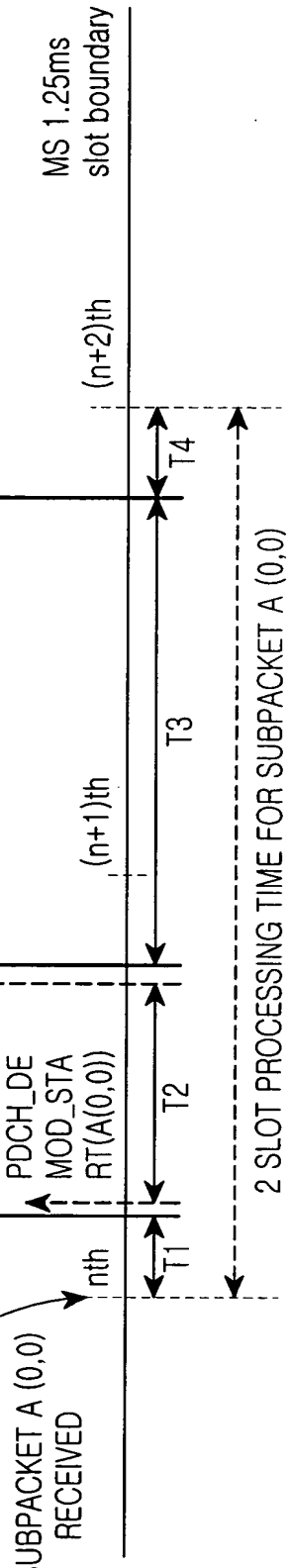
SUBPACKET A (0,0) RECEIVED
PDCCH_DEC_ DONE(A(0,0)
nth
PDCH_DE MOD_STA RT(A(0,0))
PDCH_DEMOD_ DONE(A(0,0))
PDCH_TURBO_ START(A(0,0))
(n+1)th
PDCH_TURBO_ DONE(A(0,0))
(n+2)th
MS 1.25ms slot boundary
T1
T2
T3
T4
2 SLOT PROCESSING TIME FOR SUBPACKET A (0,0)

FIG. 4

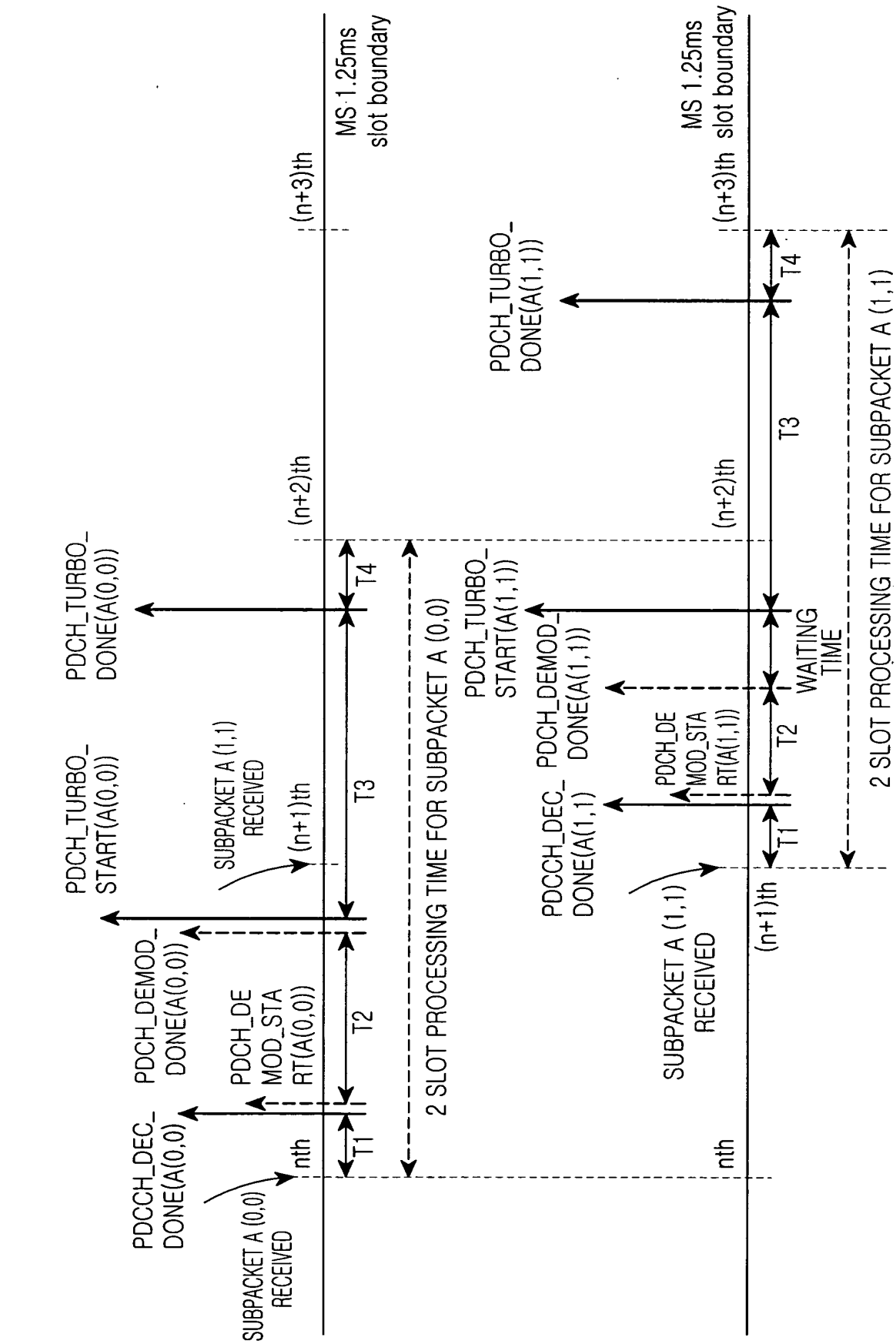
SUBPACKET A (0,0) RECEIVED
PDCCH_DEC_ DONE(A(0,0)
PDCH_DEMOD_ DONE(A(0,0))
PDCH_TURBO_ START(A(0,0))
PDCH_TURBO_ DONE(A(0,0))
nth
(n+1)th
(n+2)th
(n+3)th
MS 1.25ms slot boundary
PDCH_DE MOD_STA RT(A(0,0))
SUBPACKET A (1,1) RECEIVED
T1
T2
T3
T4
2 SLOT PROCESSING TIME FOR SUBPACKET A (0,0)
SUBPACKET A (1,1) RECEIVED
PDCCH_DEC_ DONE(A(1,1)
PDCH_DEMOD_ DONE(A(1,1))
PDCH_TURBO_ START(A(1,1))
PDCH_TURBO_ DONE(A(1,1))
PDCH_DE MOD_STA RT(A(1,1))
WAITING TIME
2 SLOT PROCESSING TIME FOR SUBPACKET A (1,1)

FIG.5

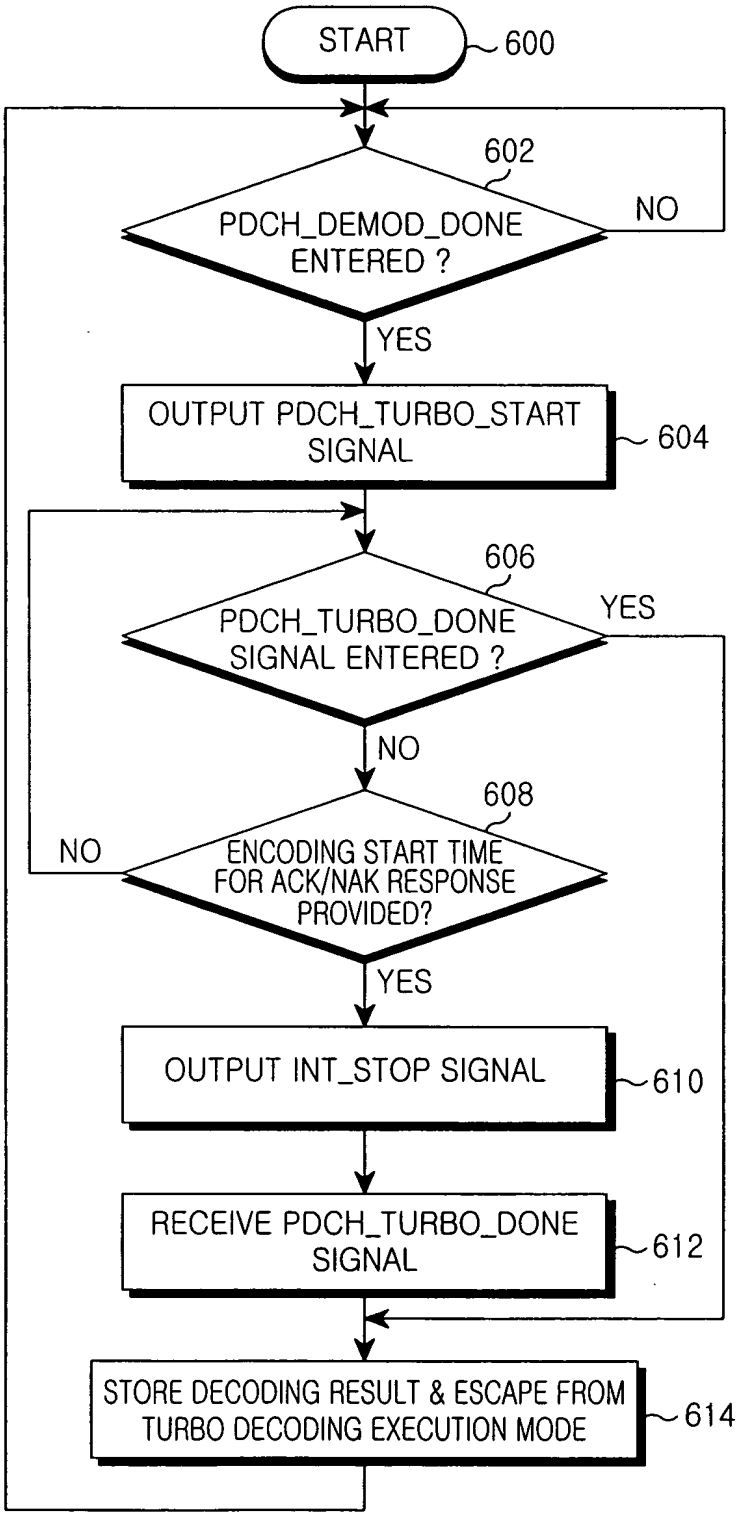
START
600
602
PDCH_DEMOD_DONE ENTERED ?
NO
YES
OUTPUT PDCH_TURBO_START SIGNAL
604
606
PDCH_TURBO_DONE SIGNAL ENTERED ?
YES
NO
608
NO
ENCODING START TIME FOR ACK/NAK RESPONSE PROVIDED?
YES
OUTPUT INT_STOP SIGNAL
610
RECEIVE PDCH_TURBO_DONE SIGNAL
612
STORE DECODING RESULT & ESCAPE FROM TURBO DECODING EXECUTION MODE
614

FIG.6

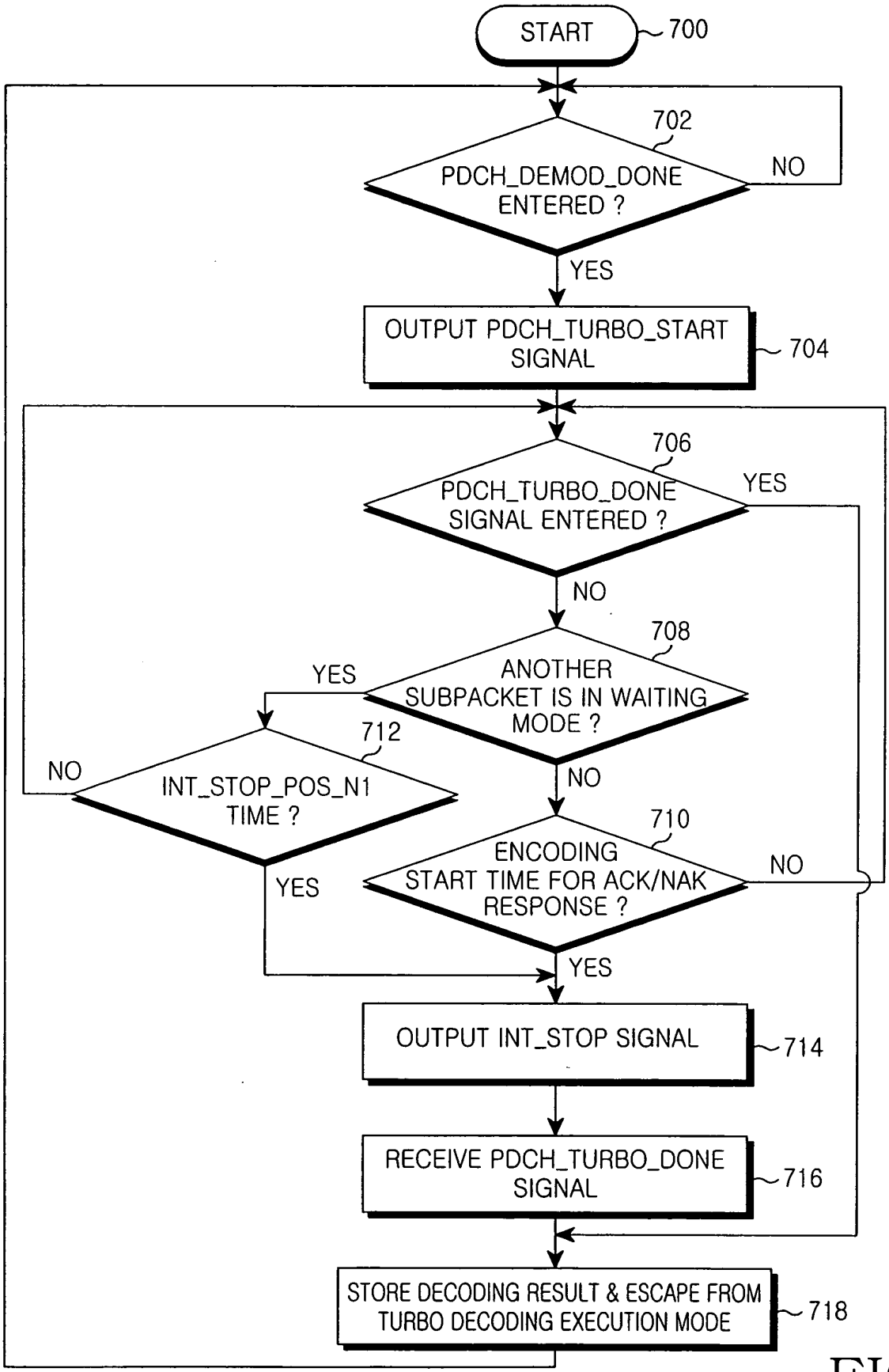
START
700
702
PDCH_DEMOD_DONE ENTERED ?
NO
YES
OUTPUT PDCH_TURBO_START SIGNAL
704
706
PDCH_TURBO_DONE SIGNAL ENTERED ?
YES
NO
708
ANOTHER SUBPACKET IS IN WAITING MODE ?
YES
712
INT_STOP_POS_N1 TIME ?
NO
NO
710
ENCODING START TIME FOR ACK/NAK RESPONSE ?
NO
YES
YES
OUTPUT INT_STOP SIGNAL
714
RECEIVE PDCH_TURBO_DONE SIGNAL
716
STORE DECODING RESULT & ESCAPE FROM TURBO DECODING EXECUTION MODE
718

FIG.7

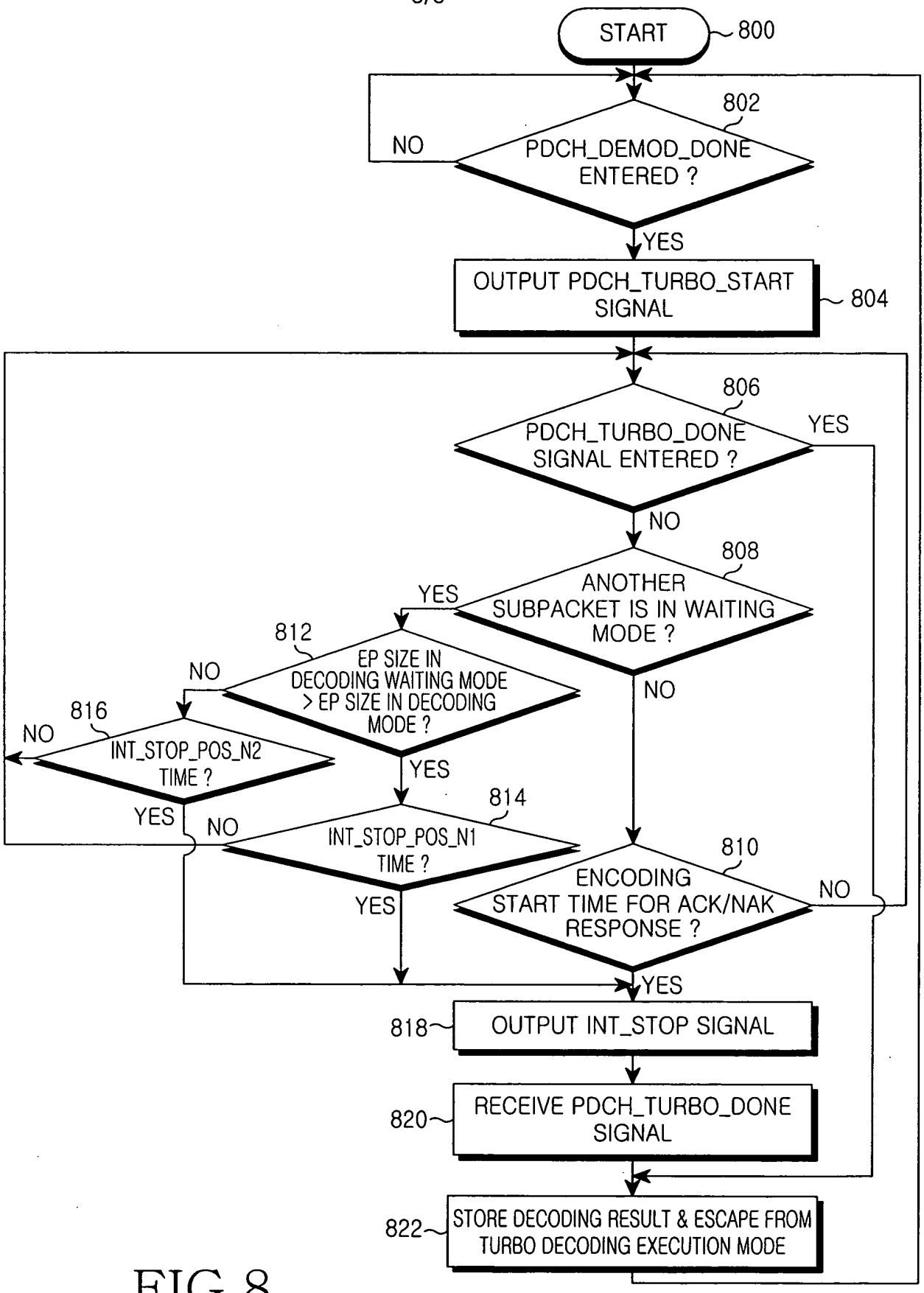
START
800
802
PDCH_DEMOD_DONE ENTERED ?
NO
YES
OUTPUT PDCH_TURBO_START SIGNAL
804
806
PDCH_TURBO_DONE SIGNAL ENTERED ?
YES
NO
808
ANOTHER SUBPACKET IS IN WAITING MODE ?
YES
NO
812
EP SIZE IN DECODING WAITING MODE > EP SIZE IN DECODING MODE ?
NO
YES
816
INT_STOP_POS_N2 TIME ?
NO
YES
814
INT_STOP_POS_N1 TIME ?
NO
YES
810
ENCODING START TIME FOR ACK/NAK RESPONSE ?
NO
YES
818
OUTPUT INT_STOP SIGNAL
820
RECEIVE PDCH_TURBO_DONE SIGNAL
822
STORE DECODING RESULT & ESCAPE FROM TURBO DECODING EXECUTION MODE

FIG.8